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	NAMED INVENTOR	FILING DATE	APPLICATION NO.	
5681-80300 2984	lga Kuturianu	01/29/2004	10/767,851	
EXAMINER	ZFL P.C	7590 01/08/2008 . HOOD, KIVLIN, KOWERT &		
WANG, BEN C	200, T.C.	,	P.O. BOX 398	
ART UNIT PAPER NUMBER		8767-0398	AUSTIN, TX 7	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
•	10/767,851	KUTURIANU ET AL.
Office Action Summary	Examiner	Art Unit
	Ben C. Wang	2192
The MAILING DATE of this communication ap		th the correspondence address
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION (136(a). In no event, however, may a rule will apply and will expire SIX (6) MON te, cause the application to become AB	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 22 (	October 2007	
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	is action is non-final.	
3) Since this application is in condition for allows		
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra		·
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-14</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/	or election requirement.	
Application Papers		
9) The specification is objected to by the Examin	er.	
10) The drawing(s) filed on is/are: a) acc	cepted or b) objected to	by the Examiner.
Applicant may not request that any objection to the	e drawing(s) be held in abeyar	ice. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correct	• =	· ·
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached	I Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).
1. Certified copies of the priority documen		- Park and Alla
2. Carried copies of the priority documen		• •
<ol> <li>Copies of the certified copies of the price</li> <li>application from the International Burea</li> </ol>	-	received in this National Stage
* See the attached detailed Office action for a lis	• • • • • • • • • • • • • • • • • • • •	received.
Attachment(s)		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Ir	nformal Patent Application
Paper No(s)/Mail Date	6)	<del></del> ·

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## **DETAILED ACTION**

1. Applicant's amendment dated October 22, 2007, responding to the Office action mailed July 25, 2007 provided in the rejection of claims 1-14, wherein claims 1-3 and 6-12 have been previously presented.

Claims 1-14 remain pending in the application and which have been fully considered by the examiner.

Applicant's arguments with respect to claims rejection have been fully considered but are moot in view of the new grounds of rejection – see *Beardsley*, art made of record, as applied hereto.

## Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beardsley et al. (Pub. No. US 2003/0131285 A1 *Automated System That Tests Software On Multiple Computers*) (hereinafter 'Beardsley' art made of record) in view of Kim Topley (*The Mobile Information Device Profile and*

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MIDlets,– Excerpted from the book of "J2ME™ In A Nutshell", Oct. 1, 2003, The O'Reilly Network™) (hereinafter 'Topley' - art made of record) and further in view of Farchi et al. (Using a model-based test generator to test for standard conformance, 2002, IBM™ Systems Journal) (hereinafter 'Farchi')

3. **As to claim 1** (Previously Presented), Beardsley discloses a method for testing computing devices, comprising: providing a plurality of suites of test programs on a server for execution by one or more computing devices (e.g., Abstract, Lines 1-2 – A system by which a software product may be tested on multiple client computers on various platforms) that are coupled to the server (e.g., [0032] – the test component 202 may be provided, for example, <u>on a server computer</u> ...), wherein the suites are represented in a plurality of formats (e.g., Abstract, Lines 4-8 – <u>for each platform and language</u> (i.e., <u>group</u>) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants <u>conducted on the product in that group</u>).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]) but does not explicitly disclose downloading the converted test programs from the server to the computing devices for execution thereof by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile*and MIDIets, Topley discloses downloading the converted test programs from the

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server to the computing devices for execution thereof by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" — this is the most common way in which MIDlets are downloaded to cell phones and similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDlet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports installation of MIDlets from an HTTP server is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the converted test programs from the server to the computing devices for execution thereof by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3<sup>rd</sup> Para.).

Further, Beardsley and Topley do not specifically disclose converting the suites to a common representation; processing the common representation in the server to define suites of converted test programs.

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However, in an analogous art of *using a model-based test generator to test for standard conformance*, Farchi discloses converting the suites to a common representation (e.g., Fig. 2, element of Abstract Test Suit; P. 99, 3<sup>rd</sup> Para – The Abstract XML Test Suite); processing the common representation in the server to define suites of converted test programs (e.g., Fig. 2, element of Test Scripts; P. 99, 4<sup>th</sup> Para., Lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley -Topley's system to further convert the suites to a common representation; process the common representation in the server to define suites of converted test programs in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3<sup>rd</sup> full para).

4. **As to claims 2** (Previously Presented) (incorporating the rejection in claim 1), Farchi discloses the method further comprising controlling from said server said execution of said converted test programs by said computing devices using no more than one test harness (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1<sup>st</sup> Para., 2<sup>nd</sup> Para.; P. 99, 3<sup>rd</sup> Para – The Abstract XML Test Suite).

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- 5. **As to claims 3** (Previously Presented) (incorporating the rejection in claim 1), Farchi discloses that the method wherein said converting said suites to the common representation includes converting said suites to a common intermediate format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1<sup>st</sup> Para., 2<sup>nd</sup> Para.; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite), and thereafter converting said common intermediate format to a native format for use during said processing of said common representation in said server (e.g., P. 99, 4<sup>th</sup> Para., Lines 1-11).
- 6. **As to claims 4** (original) (incorporating the rejection in claim 3), Farchi discloses that the method wherein said common intermediate format is a markup language (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).
- 7. **As to claims 5** (original) (incorporating the rejection in claim 4), Farchi discloses that the method wherein said markup language is XML, and said suites are converted into XTRF files (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).
- 8. **As to claim 6** (Previously Presented), Beardsley discloses a computer software product, comprising a computer-readable medium in which computer program instructions are stored, which instructions, when read by a computer,

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cause the computer to perform a method for testing computing devices, comprising the steps of: inputting a plurality of suites of test programs on a server for execution by one or more computing devices (e.g., [0022] - the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network)that are coupled to the server (e.g., [0032] – the test component 202 may be provided, for example, on a server computer ...), wherein the suites are represented in a plurality of formats (e.g., Abstract, Lines 4-8 – for each platform and language (i.e., group) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants conducted on the product in that group).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]), but does not explicitly disclose downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile* and *MIDlets*, Topley discloses downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" – this is the most common way in which <u>MIDlets are downloaded to cell phones</u> and

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similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDlet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports <u>installation of MIDlets</u> from an HTTP server is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the converted test programs to the computing devices for execution thereof by the computing devices; controlling the execution of the converted test programs by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3<sup>rd</sup> Para.).

Further, Beardsley and Topley do not specifically disclose converting the suites to a common representation; processing the common representation to define suites of converted test programs.

However, in an analogous art of *using a model-based test generator to* test for standard conformance, Farchi discloses converting the suites to a

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common representation (e.g., Fig. 2, element of Abstract Test Suit; P. 99, 3<sup>rd</sup>

Para – The Abstract XML Test Suite); processing the common representation to define suites of converted test programs (Fig. 2, element of Test Scripts; P. 99, 4<sup>th</sup> Para., Lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley-Topley's system to further convert the suites to a common representation; process the common representation in the server to define suites of converted test programs in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3<sup>rd</sup> full para).

9. **As to claim 7** (Previously Presented) (incorporating the rejection in claim 6), Farchi discloses the computer readable storage medium further comprising program instructions that are computer executable to control, from said server, said execution of said converted test programs by said computing devices using no more than one test harness therein (e.g., Fig. 2, element of Abstract Test Suit; P. 95. 1<sup>st</sup> Para., 2<sup>nd</sup> Para.; P. 99, 3<sup>rd</sup> Para – The Abstract XML Test Suite).

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- 10. **As to claims 8** (Previously Presented) (incorporating the rejection in claim 6), Farchi discloses that the computer readable storage medium wherein said converting said suites to said common representation includes converting said suites to a common intermediate format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1<sup>st</sup> Para., 2<sup>nd</sup> Para.; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite), and thereafter converting said common intermediate format to a native format for use during said processing of said common representation in said server (e.g., P. 99, 4<sup>th</sup> Para., Lines 1-11).
- 11. **As to claim 9** (Previously Presented) (incorporating the rejection in claim 8), Farchi discloses that the computer readable storage medium wherein said common intermediate format is a markup language (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).
- 12. **As to claim 10** (Previously Presented) (incorporating the rejection in claim 9), Farchi discloses that the computer readable storage medium wherein said markup language is XML, and said suites are converted into XTRF files (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).
- 13. **As to claim 11** (Previously Presented), Beardsley discloses a server apparatus for testing computing devices, comprising: a communication interface for coupling a plurality of the computing devices therewith (e.g., Abstract, Lines 1-2 A system by which a software product may be tested on multiple client

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computers on various platforms); and a processor, which is adapted to provide a suite of test programs for execution by the computing devices that are coupled to the server apparatus (e.g., [0032] – the test component 202 may be provided, for example, on a server computer ...) wherein the test programs are initially input to the server apparatus in a plurality of formats (e.g., ., Abstract, Lines 4-8 – for each platform and language (i.e., group) on which a product developer wants a product tested, the product developer provides a test packet that defines test that the product developer wants conducted on the product in that group).

Beardsley discloses the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network (e.g., [0022]), but does not explicitly disclose downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices.

However, in an analogous art of *The Mobile Information Device Profile* and *MIDIets*, Topley discloses downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices (e.g., Part 5, P. 1, Sec. of "Over a network to which the device is connected" – this is the most common way in which <u>MIDIets are downloaded to cell phones</u> and similar wireless device, although it is also applicable to network-connected PDAs; the process of deploying MIDIet suites over a network is referred to as over-the-air provisioning, or OTA provisioning for short; OTA

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provisioning is not part of the MIDP specification, but it is likely to be the dominant mechanism for distributing MIDlets, and it will doubtless be included in the formal specification in the near future; An AMS (Application Management Software) that supports <u>installation of MIDlets from an HTTP server</u> is included in the Wireless Toolkit).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Topley into the Beardsley's system to further provide downloading the test programs via the communication interface for execution by the computing devices coupled thereto, the processor being further adapted to control the execution by the computing devices in Beardsley system.

The motivation is that it would further enhance the Beardsley's system by taking, advancing and/or incorporating Topley's system which offers significant advantages for the software that implements MIDP runs in the KVM supplied by CLDC and provides additional services for the benefit of application code written using MIDP APIs as once suggested by Topley (e.g., Part 1, 3<sup>rd</sup> Para.).

Further, Beardsley and Topley do not specifically disclose the processor is further adapted to convert the plurality of formats into a common format for download thereof to the computing devices.

However, in an analogous art of *using a model-based test generator to*test for standard conformance, Farchi discloses the processor is further adapted to convert the plurality of formats into a common format for download thereof to

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the computing devices (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1<sup>st</sup> Para., 2<sup>nd</sup> Para.; P. 99, 3<sup>rd</sup> Para – The Abstract XML Test Suite).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Farchi into the Beardsley-Topley's system to further provide that the processor is further adapted to convert the plurality of formats into a common format for download thereof to the computing devices in Beardsley-Topley system.

The motivation is that it would further enhance the Beardsley-Topley's system by taking, advancing and/or incorporating Farchi's system which offers significant advantages to use a generic model-based test generator to test for standard conformance as once suggested by Farchi (e.g., A GOTCHA model helps generate a test suite of the interface that exceeds the standards testing requirements for compliance – P. 100, 3<sup>rd</sup> full para).

14. **As to claim 12** (Previously Presented) (incorporating the rejection in claim 11), Farchi discloses the server apparatus, wherein said server apparatus is configured to convert said plurality of formats into said common format by converting said plurality of formats into a common intermediate format, and thereafter converting said common intermediate format to said common format (e.g., Fig. 2, element of Abstract Test Suit; P. 95, 1<sup>st</sup> Para., 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para – The Abstract XML Test Suite).

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- 15. **As to claim 13** (original) (incorporating the rejection in claim 12), Farchi discloses that the server apparatus, wherein said common intermediate format is a markup language (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).
- 16. **As to claim 14** (original) (incorporating the rejection in claim 12), Farchi discloses that the server apparatus, wherein said common intermediate format is XTRF (e.g., P. 95, 2<sup>nd</sup> Para., Lines 1-6; P. 99, 3<sup>rd</sup> Para The Abstract XML Test Suite).

## Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is 571-270-1240. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BCW BW

TUAN DAM SUPERVISORY PATENT EXAMINER

January 4, 2008